



# Role of Coconut Development Board in entrepreneurship development and Value Addition

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## Introduction

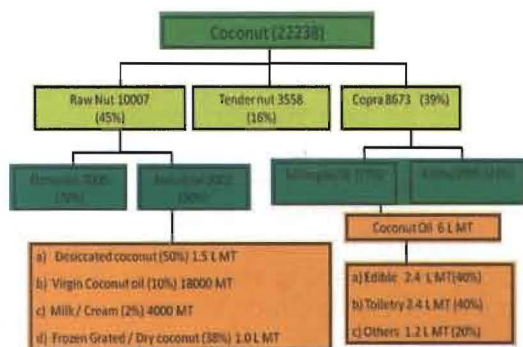
1. Coconut Development Board (CDB) came into existence in 1981, under an Act of Parliament, as the mandated organization for integrated development of coconut industry, under the Ministry of Agriculture and Farmers Welfare, Government of India. Vision of the Board is integrated development of coconut cultivation and industry in the country so as to make the coconut economy sustainable and globally competitive. The mission envisaged is to achieve targeted production and productivity in coconut and promoting product diversification by-product utilization with the active participation of State Governments Departments and other agencies. Establishment of CDB opened up new vistas in the history of coconut cultivation and industry in the country. Three and half decades of CDB can be delineated into two stages considering the shift in strategy in its approach. The first two and half decades earmarked the former stage. The last one decade, being the second stage. In the first stage coconut cultivation expanded in nontraditional areas especially in north eastern and central region of India, thereby total area under coconut in the country

witnessed unprecedented increase. Infrastructure network was created in the length and breadth of the country and thus Board showed its Pan India presence as a supplier of quality planting material throughout the country. At the time of setting up of Coconut Development Board in 1981-82, the area and production of coconut in the country remained at 1.91million ha and 5940 million nuts. In 2017-18 coconut area has increased to 1.97 million ha producing 20440 million nuts with a national average productivity of 10345 nuts per ha per annum, the production and productivity being the highest in the world. The per capita availability of coconut has considerably increased to in the country.

Processing coconut is a means of increasing farm income. Many developments have taken place in the post harvest processing sector in India. The R&D efforts of the Board in the last decade which resulted in development of technologies for many new value added products has helped India to stand among other countries in technology development. Income from processing coconut in to traditional products is low. Hence product diversification for high value added products and entrepreneurship development

is one of the approaches that could increase farm income and employment opportunities in coconut sector. Though India is the largest coconut producing country in the world, utilization of coconut in to value added products is low compared to other major coconut growing countries. Apart from enhancing the supply of coconut in the country, the Board played a productive role in the field of post harvest processing of coconut. The copra-coconut oil centered industry has been diversified and tremendous progress is achieved in the field of product diversification and by-product utilization of coconut. Many technologies were developed in association with premier Research Institutions in the country. Technologies developed for the manufacture of various products like; coconut cream, spray dried coconut milk powder, packed and preserved tender coconut water, virgin coconut oil ,preserved and packed neera and its downstream products, and by-products like; coconut water based vinegar, nata-de-coco, industrial utilization of wood for the manufacture of particle boards etc. are the important achievements of the Board. For achieving price stability and increased income, the strategy is to divert at least 20-25 percentage of the total production of matured nuts for value added products other than traditional products as copra and coconut oil.

Coconut consumption pattern in India (2017 estimate)



## 2. Coconut Product Utilization in the Country for 2017

It is estimated by the Board that 45% of the production is used as raw coconuts. Out of which 70% for domestic consumption and 30% for industries for production of desiccated coconut, virgin coconut oil, coconut milk/ cream, frozen grated/ dry coconut, etc. The rest 39% is converted to copra of which

about 23% is consumed directly for various edible purposes. Coconut oil is extracted for edible, toiletry and other purposes from the balance 77% of the copra. Remaining 16% of the total coconut production in India is consumed as tender coconut.

## 3. Policies of CDB to Promote Farm Productivity and increase Farmer's Income:

In India, development programmes and policies in coconut are mainly taken up by Coconut Development Board. Production and distribution of quality planting materials, expansion of area under coconut especially in non-traditional States, promotion of adopting integrated nutrient management, pest management and coconut based farming systems by establishing farmer participatory demonstration plots, replanting and rejuvenation of old and senile coconut gardens, technology mission on coconut for promoting value addition, facilitating formation and handholding farmer producer organizations for promoting production, processing and marketing of coconut are the major policies adopted in India for promoting coconut sector. Formation of farmer's collectives in coconut sector is encouraged by the Government of India for aggregation, farm level processing and also to facilitate taking collective plant protection measures.

## 4. Roles of Coconut Development Board to enhance production with respect to value addition:

Technology development in value addition was in infant stage in India during 1990s. Thereafter with the intervention of CDB, product diversification is initialized. However, the speed and direction of post harvesting technology and value addition is yet to be in line with that of other countries like Philippines, Sri Lanka or Thailand. Introduction of CDB scheme Technology Mission on Coconut (TMOc) has given momentum to this area and now India possesses many technologies in value addition CDB plays a pivotal role by acting as a facilitator for increasing the production and productivity and promoting product diversification and bi-product utilization in coconut. Technical and financial support was given to establish processing units with processing capacity of 12% of total production of coconut in the country. We have to achieve a quantum jump in export also in order to minimize the risk of the farmers caused by excessive dependency on coconut oil. This can be achieved through a concerted programme for product diversification to ensure at least 25% of the

total coconut production is used for value added products other than coconut oil. Various activities of the Board for promotion of product diversification and by-product utilization are given below:

4.1 Development of technologies for innovative products; The post harvest management, product diversification and by-product utilization received an impetus after the Board' started implementation of a special scheme "Technology Mission on Coconut (TMoC). The scheme is being implemented by CDB with more emphasis to promote product diversification and value addition in coconut. The industry has been benefitted with diversified products which in turn are helping to de-link the coconut oil-copra centered market. Several value added products are developed and promoted by the Board through sponsored research programmes under TMoC. Board is extending financial assistance for development of new technologies on project basis through reputed research institutions. Virgin Coconut Oil by wet processing, Spray Drying of Coconut Milk, preservation and packing of tender coconut water, Coconut Vinegar Production from Matured Coconut Water, nata-de-coco, flavored coconut milk, preserved and packed neera are few economically desirable technologies developed in the field of product diversification of coconut. Technologies available with the Board are transferring to potential entrepreneurs on need basis on payment of technology transfer fee fixed for different value added products.

4.2 Financial support for setting up of Coconut Based Industries; Financial support is extended to the tune of 25% of the project cost limited to Rs.50 lakh per project as back ended subsidy. Prospective entrepreneurs/ NGOs/ Co-operatives/ FPOs can avail the benefits of this scheme for setting up of coconut based industries/ units for manufacturing of coconut based value added products such as desiccated coconut powder, virgin coconut oil, coconut milk, coconut milk powder, flavored coconut milk (ready to drink), tender coconut water, coconut shell powder, charcoal and activated carbon and any other value added coconut products. Technical and financial support was given to establish 484 processing units with processing capacity of 2754.10 million nuts per year.

4.3 Technical advice to entrepreneurs for project preparation and setting up of coconut based processing units; Board is providing technical guidance to potential entrepreneurs for preparation of Detailed Project Report (DPR) and guidance

regarding machineries, quality specifications, export potential, marketing prospects etc. Board has empanelled few agencies for assisting entrepreneurs in preparation of DPR in this regard. As such Board is providing technical and financial support in all aspects of coconut value chain right from farmer to the traders, processors, distributors, end consumers and exportes.



4.4 Technology Demonstration/Quality testing lab; CDB has the Technology Development Centre in at Vazhakulam, Aluva, Ernakulam Kerala is engaged in the development and demonstration of technologies for product diversification and by-product utilization of coconut. The centre is devoted to product development, microbial analysis of coconut based products, apart from imparting skill development programmes to interested entrepreneurs and self help groups for acquiring technologies on post harvest coconut processing and process demonstration. Many value added and novel products were developed by the institute. Through sponsored research projects through other reputed research organizations CIT has developed technology for processing and packing of neera and various downstream products like neera sugar, neera jaggery, neera honey etc. Food products like sweet and spicy chips, sweet chunks, chocolate, cookies, flavored juice, ice cream and milk spread are the other innovative products contributed by CIT has to the coconut product basket. The Centre is engaged in the development and demonstration of technologies for product diversification and by-product utilization of coconut. The Institute has received the recognition of NABL. Facilities for chemical analysis of copra, coconut oil and coconut vinegar are also available at the CDB Institute of Technology (CIT)

## 5. Market promotion, market intelligent services and Export Promotion Council

5.1 Coconut and coconut products have very good market potential within as well as outside the country. For expanding the market for Indian coconut products across the globe, the Board is extending support to the industry through the programmes viz; Support for sales outlets/ kiosks for value added coconut products, Facilitating participation in domestic exhibitions/ trade fairs and buyer-seller meets in metropolitan cities within the country, Encouraging coconut product exporters with Award for export excellence, Overseas and domestic industrial exposure visits to prosperous manufacturers, Organizing workshops/ seminars for entrepreneurs and exporters.



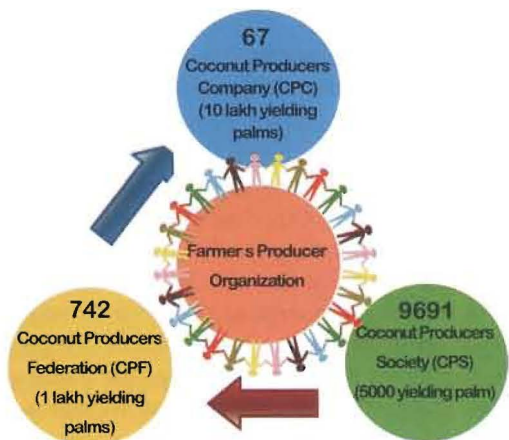
5.2 CDB is exploring new marketing strategy for directing coconut products to all domestic and international markets. India's domestic market is bigger than that of USA. More than 78% of India's urban population is located in the 63 major cities. CDB is aiming at introducing, making available and marketing maximum value added coconut products in these cities available with the processors. In the international markets, countries like China, India, USA, Indonesia and Brazil are top five most populous countries. Products of all countries are now available in all potential markets and good quality Coconut products of India could also be made available to international markets. 'Niche' markets for pharmaceutical, nutraceutical, and cosmeceutical products from coconut are emerging, giving further boost to Indian opportunities.

5.3 CDB was designated as Export Promotion Council during the year 2009. India's export is growing at 30% per annum since 2009. As Registration Cum Membership Certificate (RCMC)

from the Export Promotion Council concerned is mandatory for exports, to enable exporters to avail the various benefits under the Foreign Trade Policy and duty neutralization schemes of the Department of Revenue, it is mandatory that prospective exporters of coconut products (other than those made from coconut husk and fiber) get registered with the Coconut Development Board. In the capacity of EPC, Board has so far given registration to 3721 exporters under its fold. This has enabled the Board to monitor the export scenario closely which is an indication of country's growth in the sector. It is also important to tap the market for value added products like packaged tender coconut water, virgin coconut oil, desiccated coconut, coconut milk, milk powder, cream and coconut palm sugar in the international market. Export promotion activities of CDB need to be strengthened to achieve this goal. India is aiming at a quantum jump in export and look forward to have bigger share in the international trade. It is also necessary to give utmost attention to quality assurance to Indian products to make them globally acceptable and to cost effectiveness to make it globally competitive. Issuing Registration-Cum-Membership Certificates to exporters, facilitating participation in International Trade Fairs, analyzing market potential and market trends for the benefit of exporters, providing useful information and assistance to exporters in developing and increasing their exports, providing professional advice in areas such as technology up gradation, quality and design improvement, standards and specifications, product development, packaging etc; providing data on the exports and imports of the country, and other relevant trade data, organizing Seminars, Conferences and Buy seller meet. EPC closely monitors the export of products from India. Major Coconut Products exported from India are Activated Carbon, Fresh coconut, coconut oil, desiccated coconut powder, dry coconut, copra, and grated coconut. Other products exported are coconut based hair oil, hair cream, coconut chutney powder, coconut cookies, coconut biscuits, coconut based toilet soap, coconut shell ice cream cup etc

## 6. Facilitating three tier Farmer Producer Organization (FPO) in coconut sector.

Farmer participatory cluster approach introduced by CDB in implementation of productivity improvement programmes helped to built strong relation between farmers and Board. This further led to formation of three tier Farmer Producer



Organizations (FPOs) which was a beginning in the hand holding and thereby led to the empowerment of unorganized coconut farmers. This novel extension approach / strategy formation of three tier Farmers Producers Organization (FPO) with Coconut Producers Societies (CPS) at primary level and integrate them to form Coconut Producers Federation (CPF) at intermediate level and Coconut Producer Company (CPC) at apex level. CDB acts as a facilitator for formation of this approach. A Coconut Producer Society (CPS) consists of around 50 farmers and 5000 coconut palms and 20 such societies form Federations and 10 Federations form a Company. Thus a company which is formed by 10,000 farmers will be producing around 8 crore coconut from their jurisdiction. The main role of the Company is to establish coconut based entrepreneurs in setting up processing unit for production of value added products from coconut procured from the member farmers and its marketing. Efforts of the Board on this line have been internationally appreciated and many countries expressed interest to follow the path of Indian strategies.

## 7. Future thrust

The developmental activities of the Board contributed to increase in area, production and productivity and technology development. But more is to be done by the Board for the development of coconut industry in the country. Emphasis on product diversification need to be reoriented. Technology development in post harvest processing sector has to be intensified to minimize the dependence of coconut industry on coconut oil alone. Market promotion activities are to be strengthened. The Board has only made a beginning in this line and it has to be continued further so that more and more value-

added coconut products would appear in the market and coconut farmers could fetch remunerative price for their produce. Priority areas where CDB propose to give more thrust in future will be are to promotion of more entrepreneurship development in value addition, improvement in quality standards matching with international standards, adoption of new marketing strategy for tapping domestic and international markets. More focus on popularizing the health, nutrition and wellness benefit of coconut in the national and international scenario, continuing the aggregation of farmers into FPOs as a platform for empowerment are areas of importance to push the Indian coconut sector to the forefront. Urban Indian markets are bigger than US market. Coconut products are in demand even in non-growing areas. Image bestowed of late to coconut products as a functional food which imparts health,



nutrition and wellness commands niche markets in health sector. In the era of globalization products of all countries are available in all potential markets. The small holdings size and scattered nature of marketable surplus could be overcome through aggregation of produces by FPOs. This could help to avoid middlemen to a greater extent and will realize better income. They have been empowered to work with the support of their fellow groups in adoption of technologies including scientific coconut cultivation. Coconut products have greater demand across India and abroad. Domestic and international markets should be explored equally for the benefit of farmers and they should be equipped for export oriented production strategy. Concerted efforts of all stake holders like development agencies, research institutions, farmer groups, FPOs and entrepreneurs are needed to attain this goal. CDB unites its activities in such a way to elevate India as the world leader in processing for value addition and export in future. ■